

(FILE 'HOME' ENTERED AT 16:58:47 ON 12 MAY 2004) ✓

FILE 'CASREACT' ENTERED AT 17:01:22 ON 12 MAY 2004

L1           STRUCTURE UPLOADED  
L2           0 S L1  
L3           0 S L1 FUL

FILE 'REGISTRY' ENTERED AT 17:03:17 ON 12 MAY 2004

L4           STRUCTURE UPLOADED  
L5           0 S L4  
L6           0 S L4 FUL

FILE 'CAPLUS, USPATFULL, CA, CAOLD' ENTERED AT 17:04:16 ON 12 MAY 2004

L7           0 S SYNTHOL OLEFIN HYDROCARBON  
L8           11 S SYNTHOL OLEFIN  
L9           6 S L8 AND CARBON MONOXIDE  
L10          2 S L9 AND HYDROGEN  
L11          4 S L9 NOT L10  
L12          2 DUP REM L11 (2 DUPLICATES REMOVED)  
L13          5 S L8 NOT L9  
L14          3 DUP REM L13 (2 DUPLICATES REMOVED)  
L15          347 S SYNTHOL  
L16          15 S L15 AND ALPHA-OLEFIN?  
L17          15 DUP REM L16 (0 DUPLICATES REMOVED)  
L18          12 S L16 NOT L8

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:736213 CAPLUS

DN 137:249508

TI Monoalkylation process for the preparation of precursors for anionic surfactants

IN Nguyen, Giao Vinh; Regains, James A.

PA Crompton Corporation, USA

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002074720	A2	20020926	WO 2002-US6343	20020228
	WO 2002074720	A3	20021114		
	W:	AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EC, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2002198420	A1	20021226	US 2001-812921	20010320
	EP 1379484	A2	20040114	EP 2002-706485	20020228
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	NO 2003004192	A	20031119	NO 2003-4192	20030919
PRAI	US 2001-812921	A	20010320		
	WO 2002-US6343	W	20020228		

AB A process for monoalkylating monocyclic aromatic hydrocarbons is disclosed wherein the process comprises reacting at least one monocyclic aromatic hydrocarbon with at least one  $\alpha$ -olefin having from 4 to 20 carbon atoms in the presence of an anhydrous alkanesulfonic acid at a temperature below about 280°F.

L5 ANSWER 2 OF 3 USPATFULL on STN

AN 2002:344685 USPATFULL

TI Mono-alkylation process for the preparation of anionic surfactants

IN Nguyen, Giao Vinh, Friendswood, TX, UNITED STATES

Ragains, James Alfred, Houston, TX, UNITED STATES

PA CROMPTON CORPORATION. (U.S. corporation)

PI US 2002198420 A1 20021226

AI US 2001-812921 A1 20010320 (9)

DT Utility

FS APPLICATION

LREP Kenneth D. Tremain, UNIROYAL CHEMICAL COMPANY, INC., World Headquarters, Middlebury, CT, 06749

CLMN Number of Claims: 12

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 528

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for mono-alkylating monocyclic aromatic hydrocarbons is disclosed wherein the process comprises reacting at least one monocyclic aromatic hydrocarbon with at least one  $\alpha$ -olefin having from 4 to 20 carbon atoms in the presence of an anhydrous alkane sulfonic acid at a temperature below about 280° F.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 3 CA COPYRIGHT 2004 ACS on STN

AN 137:249508 CA

TI Monoalkylation process for the preparation of precursors for anionic surfactants

IN Nguyen, Giao Vinh; Regains, James A.

PA Crompton Corporation, USA

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002074720	A2	20020926	WO 2002-US6343	20020228
	WO 2002074720	A3	20021114		
	W:	AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EC, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2002198420	A1	20021226	US 2001-812921	20010320
	EP 1379484	A2	20040114	EP 2002-706485	20020228
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	NO 2003004192	A	20031119	NO 2003-4192	20030919
PRAI	US 2001-812921	A	20010320		
	WO 2002-US6343	W	20020228		

AB A process for monoalkylating monocyclic aromatic hydrocarbons is disclosed wherein the process comprises reacting at least one monocyclic aromatic hydrocarbon with at least one  $\alpha$ -olefin having from 4 to 20 carbon atoms in the presence of an anhydrous alkanesulfonic acid at a temperature below about 280°F.

L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2003:476981 CAPLUS  
 DN 139:168544  
 TI Household chemicals and personal care products as sources for xenobiotic organic compounds in grey wastewater  
 AU Eriksson, E.; Auffarth, K.; Eilersen, A.-M.; Henze, M.; Ledin, A.  
 CS Environment & Resources DTU, Technical University of Denmark, Lyngby, DK-2800, Den.  
 SO Water SA (2003), 29(2), 135-146  
 CODEN: WASADV; ISSN: 0378-4738  
 PB Water Research Commission  
 DT Journal  
 LA English  
 AB Despite contributing 75% of total wastewater flow to domestic sewers, little is currently known concerning the detailed production patterns and characteristics of gray wastewater. Household chemical consumption, including a diary survey of water-consuming activities, was inventoried for 7 consecutive days in a block of flats. In total, 290 parameters in 92 household chems. were registered in the inventory in which 30 of 38 tenants participated. The study was accompanied by quant. analyses of selected parameters and a screening for organic components in gray wastewater. More than 190 individual components were identified by gas chromatog.-mass spectrometry. Identified substances were grouped into 8 substance classes based on their application; concns. were semi-quant. assessed. Several fragrances, e.g., citronellol, hexyl cinnamic aldehyde menthol, and some preservations, e.g., citric and triclosan, were identified. Measurements also showed unwanted and unexpected compds., e.g., drugs and pesticides, could be present, and chems. not directly derived from household chems. or personal care products, e.g., flame retardants. The inventory provided detailed information about consumption of various types of household chems., but no information on compound concns. could be assessed due to limited data in the list of household chemical contents. It was shown that tracking potentially toxic compds. used in households was possible.  
 RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 3 USPATFULL on STN  
 AN 2002:32738 USPATFULL  
 TI Carbonylation process  
 IN Baird, Lance A., Prospect Heights, IL, UNITED STATES  
 Galperin, Leonid B., Wilmette, IL, UNITED STATES  
 Lawson, R. Joe, Arlington Heights, IL, UNITED STATES  
 Jensen, Robert H., Hinsdale, IL, UNITED STATES  
 Eliseev, Oleg L., Lubertsy, RUSSIAN FEDERATION  
 Lapidus, Albert L., Moscow, RUSSIAN FEDERATION  
 Ostapenko, Aduard G., Moscow, RUSSIAN FEDERATION  
 PI US 2002019562 A1 20020214  
 US 6646159 B2 20031111  
 AI US 2000-746585 A1 20001221 (9)  
 PRAI US 1999-173525P 19991229 (60)  
 DT Utility  
 FS APPLICATION  
 LREP JOHN G TOLOMEI, PATENT DEPARTMENT, UOP LLC, 25 EAST ALGONQUIN ROAD, P O BOX 5017, DES PLAINES, IL, 60017-5017  
 CLMN Number of Claims: 24  
 ECL Exemplary Claim: 1  
 DRWN 2 Drawing Page(s)  
 LN.CNT 1095  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Long chain alcohols and acids or other similar oxygenates such as esters are produced from paraffins of similar carbon number by a process comprising paraffin dehydrogenation, carbonylation, and separation.

Preferably a mixture of paraffins extending over several carbon numbers and recovered from a kerosene fraction is processed, and unconverted paraffins are recycled to a dehydrogenation zone. Alternative reaction zone configurations, catalyst systems and product recovery methods are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L7 ANSWER 3 OF 3 CA COPYRIGHT 2004 ACS on STN

AN 139:168544 CA

TI Household chemicals and personal care products as sources for xenobiotic organic compounds in grey wastewater

AU Eriksson, E.; Auffarth, K.; Eilersen, A.-M.; Henze, M.; Ledin, A.

CS Environment & Resources DTU, Technical University of Denmark, Lyngby, DK-2800, Den.

SO Water SA (2003), 29(2), 135-146

CODEN: WASADV; ISSN: 0378-4738

PB Water Research Commission

DT Journal

LA English

AB Despite contributing 75% of total wastewater flow to domestic sewers, little is currently known concerning the detailed production patterns and characteristics of gray wastewater. Household chemical consumption, including a diary survey of water-consuming activities, was inventoried for 7 consecutive days in a block of flats. In total, 290 parameters in 92 household chems. were registered in the inventory in which 30 of 38 tenants participated. The study was accompanied by quant. analyses of selected parameters and a screening for organic components in gray wastewater. More than 190 individual components were identified by gas chromatog.-mass spectrometry. Identified substances were grouped into 8 substance classes based on their application; concns. were semi-quant. assessed. Several fragrances, e.g., citronellol, hexyl cinnamic aldehyde menthol, and some preservations, e.g., citric and triclosan, were identified. Measurements also showed unwanted and unexpected compds., e.g., drugs and pesticides, could be present, and chems. not directly derived from household chems. or personal care products, e.g., flame retardants. The inventory provided detailed information about consumption of various types of household chems., but no information on compound concns. could be assessed due to limited data in the list of household chemical contents. It was shown that tracking potentially toxic compds. used in households was possible.

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:736213 CAPLUS

DN 137:249508

TI Monoalkylation process for the preparation of precursors for anionic surfactants

IN Nguyen, Giao Vinh; Regains, James A.

PA Crompton Corporation, USA

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002074720	A2	20020926	WO 2002-US6343	20020228
	WO 2002074720	A3	20021114		
	W:	AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EC, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2002198420	A1	20021226	US 2001-812921	20010320
	EP 1379484	A2	20040114	EP 2002-706485	20020228
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	NO 2003004192	A	20031119	NO 2003-4192	20030919
PRAI	US 2001-812921	A	20010320		
	WO 2002-US6343	W	20020228		

AB A process for **monoalkylating** monocyclic **arom.** hydrocarbons is disclosed wherein the process comprises reacting at least one monocyclic **arom.** hydrocarbon with at least one  $\alpha$ -**olefin** having from 4 to 20 carbon atoms in the presence of an anhydrous alkanesulfonic acid at a temperature below about 280°F.

L15 ANSWER 2 OF 2 CA COPYRIGHT 2004 ACS on STN

AN 137:249508 CA

TI Monoalkylation process for the preparation of precursors for anionic surfactants

IN Nguyen, Giao Vinh; Regains, James A.

PA Crompton Corporation, USA

SO PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002074720	A2	20020926	WO 2002-US6343	20020228
	WO 2002074720	A3	20021114		
	W:	AE, AG, AL, AM, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CO, CR, CU, CZ, DM, DZ, EC, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2002198420	A1	20021226	US 2001-812921	20010320

EP 1379484            A2    20040114            EP 2002-706485    20020228

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

NO 2003004192        A    20031119            NO 2003-4192        20030919

PRAI US 2001-812921    A    20010320

WO 2002-US6343        W    20020228

AB    A process for **monoalkylating** monocyclic **arom.**

hydrocarbons is disclosed wherein the process comprises reacting at least  
one monocyclic **arom.** hydrocarbon with at least one  $\alpha$ -  
**olefin** having from 4 to 20 carbon atoms in the presence of an  
anhydrous alkanesulfonic acid at a temperature below about 280°F.

(FILE 'HOME' ENTERED AT 11:56:24 ON 05 MAY 2004) ✓

FILE 'REGISTRY' ENTERED AT 12:02:18 ON 05 MAY 2004

L1 1 S O-XYLENE/CN  
L2 1 S 1-DODECENE/CN  
L3 1 S METHANESULFONIC ACID/CN

FILE 'CAPLUS, USPATFULL, CA, CAOLD' ENTERED AT 12:03:56 ON 05 MAY 2004

L4 237 S L1 AND L2  
L5 3 S L4 AND L3  
L6 6 S L4 AND ?SULFONIC?  
L7 3 S L6 NOT L5  
L8 0 S BENZENE/CN

FILE 'REGISTRY' ENTERED AT 12:06:33 ON 05 MAY 2004

L9 1 S BENZENE/CN  
L10 0 S L9 AND L2

FILE 'CAPLUS, USPATFULL, CA, CAOLD' ENTERED AT 12:07:12 ON 05 MAY 2004

L11 726 S L9 AND L2  
L12 3 S L11 AND L3  
L13 0 S L12 NOT L5  
L14 205 S MONOALKYLAT? (P) AROMATIC (P) ?OLEFIN?  
L15 2 S L14 AND L3

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1

AN 1952:7132 CAPLUS

DN 46:7132

OREF 46:1249a-b

TI Alkylation process

IN Lien, Arthur P.; Hill, Philip; Deters, John F.

PA Standard Oil Co. of Indiana

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2564072		19510814	US	
AB	Aromatic hydrocarbons (I), e.g. C <sub>6</sub> H <sub>6</sub> or C <sub>6</sub> H <sub>5</sub> Me, are alkylated under alkylating conditions of temperature and pressure in the presence of liquid HF (II) with Synthol (III), an olefinic hydrocarbon fraction containing C <sub>10</sub> -C <sub>15</sub> olefins and O-containing compds. (IV) including a carbonyl group, prepared by the hydrogenation of CO in the presence of an iron catalyst. The alkylation is run in such a manner as to avoid contact of III with II in the absence of I. The alkylation products are separated from the partially spent, liquid-catalyst phase containing IV by gravity, and the lower or catalyst phase is withdrawn; II is recovered from IV by distillation. The alkylated products may be sulfonated to yield detergents.				

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2

AN 1952:18968 CAPLUS

DN 46:18968

OREF 46:3260h

TI Alkylation process

PA Standard Oil Co. of Indiana

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	GB 658428		19511010	GB	
AB	See U.S. 2,564,072 (C.A. 46, 1249a).				

L14 ANSWER 1 OF 3 USPATFULL on STN  
 AN 2003:210016 USPATFULL  
 TI Processes for making alkylbenzenesulfonate surfactants and products thereof  
 IN Scheibel, Jeffrey John, Loveland, OH, United States  
 Kott, Kevin Lee, Loveland, OH, United States  
 Cripe, Thomas Anthony, Loveland, OH, United States  
 Burckett-St. Laurent, James Charles Theophile Roger, Cincinnati, OH, United States  
 Connor, Daniel Stedman, Cincinnati, OH, United States  
 PA The Procter & Gamble Company, Cincinnati, OH, United States (U.S. corporation)  
 PI US 6602840 B1 20030805  
 AI US 2000-478909 20000107 (9)  
 RLI Continuation of Ser. No. WO 1998-IB1096, filed on 20 Jul 1998  
 PRAI US 1997-53209P 19970721 (60)  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Ogden, Necholus  
 LREP Robinson, Ian S., Zerby, Kim W., Miller, Steven W.  
 CLMN Number of Claims: 50  
 ECL Exemplary Claim: 1  
 DRWN 5 Drawing Figure(s); 5 Drawing Page(s)  
 LN.CNT 1701

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is in the field of processes for making alkylbenzenesulfonate surfactants. The processes herein include a combination of two essential steps, delinearization and alkylation. The delinearization step selected herein introduces particular types of limited branching into an aliphatic hydrocarbon having ten or more, but no more than about 16, carbon atoms. The hydrocarbon includes olefin having a hydrocarbon chain length suitable for detergent manufacture, e.g., C.sub.10-C.sub.14, or a corresponding paraffin. The second essential step is an alkylation step having an internal isomer selectivity of from 0 to no more than about 40 in which the hydrocarbon is used to monoalkylate benzene catalytically with an alkylation catalyst. Such alkylation catalysts preferably comprise an at least partially crystalline porous zeolite-containing solid, the zeolite having moderate acidity and intermediate pore size. Preferred alkylation catalysts include certain at least partially dealuminized acidic nonfluoridated mordenites. The processes herein further comprise sulfonating, neutralizing and incorporating the resulting modified alkylbenzenesulfonate surfactants into consumer products. The invention relates also to the products of the processes, including modified surfactants and consumer cleaning products containing them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1  
 AN 1986:71577 CAPLUS  
 DN 104:71577  
 TI Upgrading Fischer-Tropsch olefins  
 IN Smith, Fritz A.; Tabak, Samuel A.  
 PA Mobil Oil Corp., USA  
 SO U.S., 8 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	US 4544792	A	19851001	US 1984-681413	19841213
	ZA 8503863	A	19861230	ZA 1985-3863	19850521

AU 8548433	A1	19860619	AU 1985-48433	19851009
AU 587206	B2	19890810		
EP 188872	A1	19860730	EP 1985-307481	19851017
EP 188872	B1	19890329		

R: BE, DE, FR, GB, IT, NL

CA 1252122	A1	19890404	CA 1985-496466	19851128
JP 61145127	A2	19860702	JP 1985-279405	19851213
JP 06039392	B4	19940525		

PRAI US 1984-681413 19841213

AB Olefinic feedstocks (e.g., **Synthol olefins** from Fischer-Tropsch synthesis) containing oxygenated hydrocarbons are upgraded by contacting the feedstocks with a zeolite catalyst at 230-325° and 4000-7000 kPa to obtain oligomerized olefins, and recycling light products with the C5-6 olefins in presence of H at ≥325° to obtain an effluent containing heavy (i.e., C10-20) distillate hydrocarbons, light gas, and byproduct water. Thus, a Fischer-Tropsch olefinic feed stock (containing 0.6 weight% oxygenated hydrocarbons) was upgraded by reaction over HZSM-5 zeolite catalyst at 5600 kPa to convert ≥95% butenes followed by recycling of light products with the C5-6 hydrocarbons (b. <450°F) in presence of 0.6 volume% H to obtain ≥70 weight% heavy distillates (b. ≥450 °F) that had a viscosity (at 60°F) of 3.45 cSt, vs. 3.34 cSt for the heavy distillates obtained during the recycling step in the presence of N. The catalyst aging rate was reduced by .apprx.40% by addition of H.

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2

AN 1952:18967 CAPLUS

DN 46:18967

OREF 46:3260f-h

TI Fluidized-catalyst process for conversion of hydrocarbons

IN Riggs, Wm. R.

PA Sinclair Refining Co.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

PI	US 2509745	19500530	US	
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AB In the fluid-catalyst conversion of hydrocarbons, the catalyst is . regenerated by withdrawing it under gravity from the reaction zone, suspending it in flue gases from the regenerator and conveying it to a stripper separated from the reactor, where the flue gases remove essentially all hydrocarbons, then passing it into a regenerator countercurrently to an upwardly moving stream of air in such proportion that the resulting flue gases, to be passed to spent catalyst, are free of O. This process conserves heat, effects a more efficient recovery of residual oil in the catalyst, and a more uniform regeneration, minimizes the danger of overburning the catalyst, and prolongs its life by avoiding the use of steam.

L18 ANSWER 8 OF 12 USPATFULL on STN  
AN 78:48857 USPATFULL  
TI Combination process for upgrading **synthol** naphtha fractions  
IN Caesar, Philip D., Princeton, NJ, United States  
Garwood, William E., Haddonfield, NJ, United States  
Krudewig, William F., Riverton, NJ, United States  
Wise, John J., Media, PA, United States  
PA Mobil Oil Corporation, New York, NY, United States (U.S. corporation)  
PI US 4111792 19780905  
AI US 1977-767876 19770211 (5)  
RLI Continuation-in-part of Ser. No. US 1976-732235, filed on 14 Oct 1976,  
now Defensive Publication No.  
DT Utility  
FS Granted  
EXNAM Primary Examiner: Gantz, Delbert E.; Assistant Examiner: Schmitkons, G.  
E.  
LREP Huggett, Charles A., Farnsworth, Carl D.  
CLMN Number of Claims: 10  
ECL Exemplary Claim: 1  
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)  
LN.CNT 850  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
AB Fischer-Tropsch **synthol** naptha is upgraded to high octane  
gasoline with minimum yield loss in a multistep process comprising  
fractionating the **synthol** naptha to give a C.sub.5 + C.sub.6  
fraction and C.sub.7.sup.+ fraction, processing the C.sub.5 + C.sub.6  
fraction over a ZSM-5 catalyst under dense phase conditions, pretreating  
and reforming the C.sub.7.sup.+ fraction under conventional conditions,  
and blending the C.sub.5.sup.+ products from both the C.sub.5 + C.sub.6  
and C.sub.7.sup.+ processing steps.